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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/971,704	10/09/2001	Tatsuya Kato	214861US2	4231
22850	7590	08/02/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			TRAN, THANG V	
			ART UNIT	PAPER NUMBER
			2653	

DATE MAILED: 08/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/971,704

Applicant(s)

KATO ET AL.

Examiner

Thang Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 8 and 9 is/are rejected.
- 7) ☒ Claim(s) 4 and 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

BEST AVAILABLE COPY**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5, 6, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Utsunomiya et al. (US 6,040,030).

Utsunomiya et al. according to Figs 1-3, discloses a method for record/reproducing a phase change type optical recording medium comprising all limitations of the claimed invention as interpreted below.

Regarding claim 1, see Figs. 103, which describes an optical recording method for recording information in an optical recording medium comprising a grooved light-transparent substrate and a phase change recording layer thereon (see Fig. 1 or 2), by irradiating a laser beam thereto through an objective lens in an optical system (see column 4, lines 31-55), wherein the recording is carried out in the grooves under the conditions:

$$0.48 \leq P_T / (\lambda / NA) \leq 0.74 \text{ and } P_T \leq 0.50 \mu\text{m},$$

provided that the laser beam used for recording has a wavelength λ , the objective lens has a numerical aperture NA, and recording tracks are arranged at a pitch P_T (see column 5, lines 1-39). Note: since $(\lambda / NA) / P \geq 1.78$ as disclosed by Utsunomiya is equal to $P / (\lambda / NA) \geq 0.56$ and $P \leq 0.65 \mu\text{m}$, limitations recited in the claimed invention are within the range as disclosed by Utsunomiya et al.

Regarding claim 2, see column 10, lines 22-27.

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Regarding claim 3, see information related to cross erase where mark is recorded or overwritten over adjacent tracks.

Regarding claim 5, see the rejection applied to claim 1 above.

Regarding claim 6, see information related to cross erase where mark is recorded or overwritten over adjacent tracks.

Regarding claims 8 and 9, see the rejection applied to claims 1 and 5 and the recording medium shown in Fig. 1 or 2.

Allowable Subject Matter

3. Claims 4 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 4 and 7 are allowable over the prior art of record because the prior art of record, considered in combination or individually, fails to suggest or fairly teach a combination of all limitations as recited in claim 4 or 7.

Cited References

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references relate to a phase change recording medium and/or method for recording/reproducing mark on/from a recording medium of a phase change type particularly directed to a relation between a wavelength λ , a numerical aperture NA of an objective lens and track pitch when recording/reproducing is performed.


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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thang Tran whose telephone number is (703) 308-1551. The examiner can normally be reached on M-F 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on 703 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Thang Tran
Primary Examiner
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